

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P557003

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-81-94-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P557003
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-2HI-35-UNV-81-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

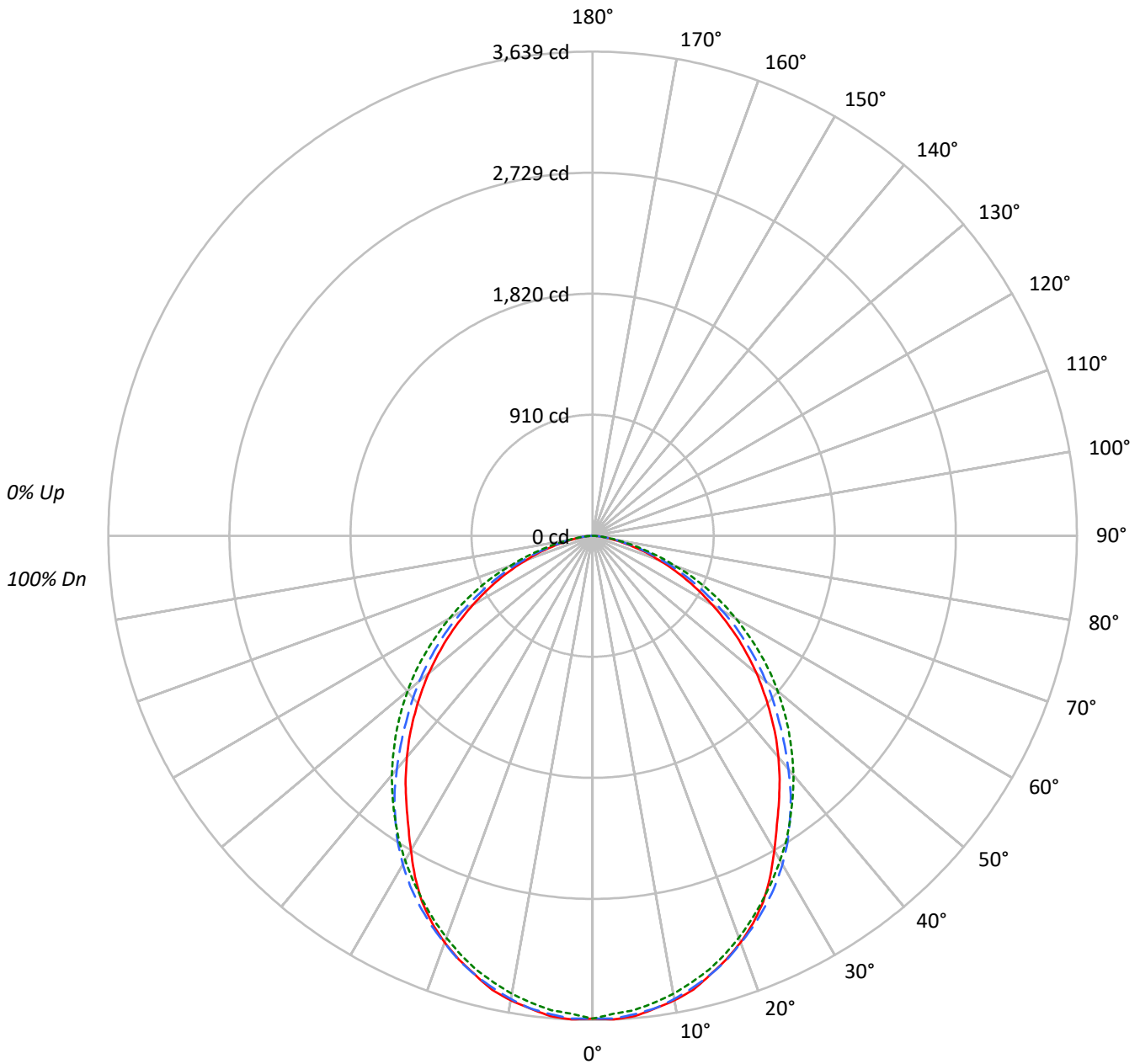
Lumens per Lamp: N/A
Luminaire Lumens: 8391.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9765	9765	9765
5°	9791	9750	9667
10°	9687	9661	9550
15°	9516	9516	9407
20°	9314	9326	9206
25°	9007	9119	8974
30°	8482	8863	8755
35°	8015	8496	8509
40°	7625	8036	8247
45°	7189	7550	7937
50°	6729	7114	7599
55°	6207	6619	7188
60°	5590	6040	6685
65°	4935	5370	6081
70°	4113	4574	5166
75°	3232	3653	4044
80°	2312	2571	2851
85°	1507	1507	1420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.7	4.1
10°-20°	959.9	11.4
20°-30°	1402.7	16.7
30°-40°	1592.2	19.0
40°-50°	1537.0	18.3
50°-60°	1267.9	15.1
60°-70°	844.3	10.1
70°-80°	377.8	4.5
80°-90°	67.6	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2704.2	32.2
0°-40°	4296.3	51.2
0°-60°	7101.2	84.6
0°-90°	8391.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8391.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3629	3629	3629	3629	3629	
5°	3625	3623	3609	3590	3579	343
15°	3416	3424	3416	3400	3377	963
25°	3034	3057	3071	3049	3022	1389
35°	2440	2473	2586	2600	2590	1529
45°	1889	1921	1984	2074	2086	1457
55°	1323	1345	1411	1489	1532	1181
65°	775	796	843	903	955	769
75°	311	328	351	368	389	340
85°	49	49	49	46	46	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3628.9	3628.9	3628.9	3628.9	3628.9
2.5°	3638.6	3640.0	3631.7	3609.4	3595.4
5°	3624.7	3623.3	3609.4	3589.9	3578.7
7.5°	3584.3	3587.1	3582.9	3555.0	3539.7
10°	3545.2	3546.6	3535.5	3513.2	3495.1
12.5°	3495.1	3493.7	3478.3	3467.2	3437.9
15°	3415.6	3424.0	3415.6	3400.3	3376.6
17.5°	3338.9	3338.9	3344.5	3318.0	3299.9
20°	3252.5	3256.7	3256.7	3235.7	3214.8
22.5°	3152.1	3164.6	3168.8	3146.5	3121.4
25°	3033.6	3057.3	3071.2	3048.9	3022.4
27.5°	2890.0	2926.3	2968.1	2951.3	2922.1
30°	2729.7	2782.7	2852.4	2838.4	2817.5
32.5°	2577.7	2630.7	2726.9	2721.3	2710.2
35°	2439.7	2473.2	2586.1	2600.0	2590.3
37.5°	2308.7	2339.3	2445.3	2477.3	2469.0
40°	2170.6	2204.1	2287.7	2344.9	2347.7
42.5°	2034.0	2066.1	2134.4	2216.6	2216.6
45°	1889.0	1921.1	1983.8	2074.4	2085.6
47.5°	1746.8	1780.3	1841.6	1932.2	1950.4
50°	1607.4	1638.1	1699.4	1787.3	1815.1
52.5°	1462.4	1495.9	1555.8	1636.7	1677.1
55°	1323.0	1345.3	1410.8	1488.9	1532.1
57.5°	1178.0	1198.9	1272.8	1339.7	1384.4
60°	1038.6	1065.1	1122.3	1190.6	1242.2
62.5°	904.8	932.7	981.5	1041.4	1100.0
65°	775.1	796.0	843.4	903.4	955.0
67.5°	649.7	667.8	715.2	757.0	811.4
70°	522.8	546.5	581.3	621.8	656.6
72.5°	421.0	430.8	460.1	489.3	525.6
75°	310.9	327.6	351.3	368.0	389.0
77.5°	223.1	232.8	246.8	260.7	280.2
80°	149.2	153.4	165.9	168.7	184.0
82.5°	90.6	93.4	96.2	97.6	103.2
85°	48.8	48.8	48.8	46.0	46.0
87.5°	27.9	27.9	23.7	19.5	13.9
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)